

5 A method of optimizing malignancy therapy includes surgical removal or  
reduction of the body burden of malignant cells and retention of some  
of those cells for subsequent use in immunotherapy. Radiotherapy may  
10 be employed at a radiation dosage below the threshold for normal tissue  
necrosis but on a correspondingly faster schedule than is the present  
United States standard to provide preservation of normal tissue  
structure. Normal tissue tolerable limits for one fraction are in the range  
of 10 - 13 Gy or Gy-Eq. The removed tumor cells are altered genetically  
15 to enhance their immunogenicity and also altered ex vivo by radiation or  
by any other means to render them incapable of sustained clonogenic  
propagation and then are re-injected using multiple sequenced injections.